

## GOGO FISH

(*Mcnamaraspis kaprios* Long, 1995)

### Fossil Emblem of the State of Western Australia

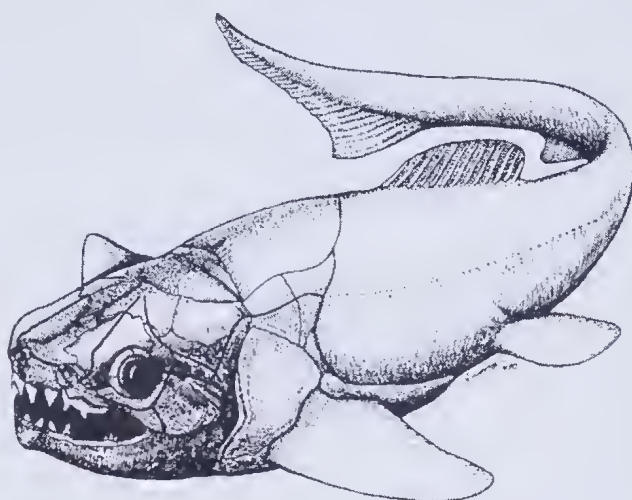
In the far north of Western Australia, about 100 kilometres south-east of Fitzroy Crossing, are the remains of a giant barrier reef that 370 million years ago teemed with life. From shales known as the Gogo Formation, that formed in quiet inter-reef bays have come exquisitely preserved, three-dimensional skeletons of the fishes that swam in these ancient seas. Preserved as original bone in limestone nodules within the shale, they represent the best preserved early fishes in the world.

One of the major groups of extinct fishes that swam around these ancient reefs is a group known as placoderms. One is *Mcnamaraspis kaprios*, a fish that in life would have been about 25 centimetres long. Like other placoderms, it is characterized by a bony head shield which articulates in a ball-and-socket joint to a trunk shield. In life it possessed a shark-like body, with a single dorsal fin, fleshy paired pectoral and pelvic fins; and an anal fin.

*Mcnamaraspis* is special in that the fossils have annular cartilage preserved in the snout, the first evidence for this structure in placoderm fishes. This is significant because it demonstrates a close evolutionary relationship between sharks and placoderms. This, combined with the sharp, prominent teeth, imply that *Mcnamaraspis* was a voracious predator, probably feeding on the small, shrimp-like crustaceans that abounded in the warm, tropical seas of prehistoric Western Australia.

*Mcnamaraspis kaprios* was found by Dr John Long in August 1986 and described by him in 1995. It was declared the fossil emblem of the State of Western Australia by His Excellency Major General Philip Michael Jeffery, Officer of the Order of Australia, Military Cross, Governor of the State of Western Australia, on 5 December, 1995.

Long J A (1995) A new plourdosteid arthrodire from the Upper Devonian Gogo Formation of Western Australia. *Palaeontology* 38:39-62.



[drawing by John Long]

[John Long, Western Australian Museum]